

**Commonwealth of Kentucky**  
**Division for Air Quality**

**PERMIT APPLICATION SUMMARY FORM**

Completed by: Kenvirons Incorporated

GENERAL INFORMATION:

Name:	Sun Chemical Corporation, Wurtland Facility
Address:	100 Wurts Road, Wurtland, KY 41144
Date application received:	April 13, 2004
SIC/Source description:	2865/Pigment Intermediate Manufacturers
Source ID #:	21-089-00032
Source A.I. #:	1604
Activity #:	APE20040001
Permit number:	V-05-042

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
___ Administrative	<input checked="" type="checkbox"/> Title V
___ Minor	<input checked="" type="checkbox"/> Synthetic minor
___ Significant	<input checked="" type="checkbox"/> Operating
<input checked="" type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input checked="" type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input checked="" type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input checked="" type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☐ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☒ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☒ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

**EMISSIONS SUMMARY:**

Pollutant	2004 Actual Emissions (tpy)	Title V Potential Emissions (tpy)
PM	21.0	33.4
PM10	10.7	20.6
SO <sub>2</sub>	0.067	90
NO <sub>x</sub>	21.7	72.6
CO	7.67	27.1
VOC	26.5	40.3
Ammonia	45.2	71.5
HAP $\geq$ 10 tpy		
1,2,4-Trichlorobenzene	16.2	24.9
Hydrogen Chloride	0.92	12.7
Total HAPs	19.7	40.8

**SOURCE PROCESS DESCRIPTION:**

Sun Chemical Corporation, Wurtland Facility manufactures CPC Blue, a pigments intermediate feed stock by reacting Urea, Phthalic Anhydride and Cuprous Chloride in six batch reactors. After the reaction cycle is completed, material is decanted, washed, filter pressed and dried.

Ammonia is produced as a byproduct of the reaction. Reaction solvent is lost during the drying process. A carbon bed adsorber is used to recover solvent. Ammonia and solvent emissions are controlled by a low NO<sub>x</sub> afterburner system (Noxidizer).

The facility is classified as a Title V major source of air pollution, based on the potential to emit more than 10 tpy of a single hazardous air pollutants (HAP) and more than 25 tpy total HAP. Sun Chemical is also classified as a Synthetic Minor Source for SO<sub>2</sub>, electing to limit emissions to preclude PSD applicability.

**EMISSION AND OPERATING CAPS DESCRIPTION:**

The following is an operating limitation included in permit number V-05-042 under Production, Emission Point (3) in Section B.

V-05-042

Pursuant to 401 KAR 63:021 and Agreed Order #DAQ-17972-114, the production rate of Copper Phthalocyanine Crude Blue shall not exceed 11,000 tons/year for any consecutive twelve months.

Sun Chemical is also classified as a Synthetic Minor Source for SO<sub>2</sub>, electing to limit emissions to preclude PSD applicability. As such, sourcewide emissions of SO<sub>2</sub> are limited to a maximum of 90 tons per year based upon a 12-month rolling average.